

### Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Currently amended) An isolated DNA molecule from a *Bacillus* species encoding a single-strand binding protein, the isolated DNA molecule hybridizing to the complete complement of SEQ ID NO: 175 under hybridization conditions that are at least as stringent as use of a medium comprising ~~0.9M sodium citrate buffer at a temperature of 37°C~~ 5X sodium citrate buffer and at a temperature of 65°C, followed by washing in 5X sodium citrate buffer at 65°C, wherein the encoded single-strand binding protein binds to single-stranded DNA.

2. (Original) The isolated DNA molecule according to claim 1, wherein the *Bacillus* species is *Bacillus stearothermophilus*.

3-5 (Cancelled)

6. (Original) An expression system comprising an expression vector into which is inserted a heterologous DNA molecule according to claim 1.

7. (Original) A host cell comprising a heterologous DNA molecule according to claim 1.

8. (Original) A method of producing a recombinant thermostable single-strand binding protein from a *Bacillus* species, said method comprising:

transforming a host cell with the heterologous DNA molecule according to claim 1 under conditions suitable for expression of the single-strand binding protein, and  
isolating the single-strand binding protein.

9. (Original) An isolated DNA molecule from *Bacillus stearothermophilus* encoding a single-strand binding protein, wherein the single-strand binding protein can bind to ssDNA to remove secondary structure elements from the ssDNA.

10-11. (Cancelled)

12. (Previously presented) An isolated DNA molecule according to claim 1, wherein the single-strand binding protein encoded by the DNA molecule is at least 80 percent identical to the amino acid sequence of SEQ ID NO: 176.

13. (Previously presented) An isolated DNA molecule according to claim 1, wherein the single-strand binding protein encoded by the DNA molecule is at least 90 percent identical to the amino acid sequence of SEQ ID NO: 176.

14. (Previously presented) An isolated DNA molecule according to claim 1, wherein the single-strand binding protein encoded by the DNA molecule is at least 95 percent identical to the amino acid sequence of SEQ ID NO: 176.

15. (Previously presented) An isolated DNA molecule according to claim 1, wherein the DNA molecule is at least 90 percent identical to the nucleotide sequence of SEQ ID NO: 175.

16. (Previously presented) An isolated DNA molecule according to claim 1, wherein the DNA molecule is at least 95 percent identical to the nucleotide sequence of SEQ ID NO: 175.

17. (Previously presented) An isolated DNA molecule that encodes the amino acid sequence of SEQ ID NO: 176.

18. (Previously presented) The isolated DNA molecule according to claim 17, wherein the DNA molecule comprises the nucleotide sequence of SEQ ID NO: 175.

19. (Previously presented) An expression system comprising an expression vector into which is inserted a heterologous DNA molecule according to claim 17.

20. (Previously presented) A host cell comprising a heterologous DNA molecule according to claim 1.

21. (Previously presented) A method of producing a recombinant thermostable single-strand binding protein of a DNA polymerase III-type enzyme, said method comprising:

transforming a host cell with the heterologous DNA molecule according to claim 17 under conditions suitable for expression of the single-strand binding protein, and  
isolating the single-strand binding protein.